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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/939,934	08/27/2001	Scott R. Burge	5968	4045

7590 06/14/2006

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EXAMINER

SIEFKE, SAMUEL P

ART UNIT	PAPER NUMBER
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1743

DATE MAILED: 06/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/939,934	BURGE ET AL.	
	Examiner	Art Unit	
	Samuel P. Siefke	1743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status

This Office Action is in response to the amendment filed 3/23/06. Claims 1-3 and 5-17 are currently pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-3 and 5-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morton (USPN 5,646,863) in view of Burge (USPN 5,708,220).

Morton discloses a water monitoring system and method that comprises a diversion means (fig. 3, ref. 20a, 20b; two arrows) that diverts sample water to radiation

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counter (fig. 3; col. 8, lines 28-34) via a first flow path, or to a sample pretreatment (30) via a second flow path. In column, 8, lines 15-27, Morton further lists other possibilities besides a radiation counter as other water quality measurements devices that can be used, all of which are analysis performed on the sample (pH, temperature). The groundwater 20a or surface and industrial water 20b is pumped through water filter 90, filtering out any sediment that might exist in groundwater 20a or surface water and industrial water 20b, and is collected in water chamber 92, where the pH and temperature of the water is measured at 78. Water chamber 92 can also house additional sensors for the purpose of measuring other water quality parameters (not shown). Groundwater 20a or surface and industrial water 20b is then combined with acid solution 80 in order to make fresh water electrolytic. The combined solution is then routed to sample pretreatment 30 which contains oxidation module 96 and reduction module 98. Here the metal is stripped from the sample water (col. 8, line 28- col. 9, line 12). A standard solution containing known metal concentrations is pumped from standard solution pump 72 into the water stream output from the pretreated sample. Finally the concentration of metal concentration in the water sample from the second flow path is determined (col. 9, lines 24-28). Morton teaches that a communication system for transmission of data to a remote area (claim 23).

Morton does not teach a calibration loop, a valve loop or that the two diverted water samples reunite.

Burge discloses a liquid sampling device that comprises a sampling device within a well casing (col. 4, lines 11-26) and comprising a valve means (col. 5, lines 18-21)

and water level sensor (col. 5, lines 30-33) means to provide a ground water sample of a predetermined volume (col. 4, line 23). A surface sample receiving and control facility includes a sample receiver connected to the sampling device through a sample transfer tube and control means connected to the sampling device for operating the device in its sample collecting and transferring modes. The ground level sample receiver may itself include means for analyzing the received liquid samples directly within the receiver or the sample may be removed and transported to a laboratory for further analysis (col. 3, lines 4-35). It would have been obvious to one of ordinary skill in the art at the time the invention was created to modify Morton to use a liquid sampling device of Burge in order to provide easy access to water sampling for determination of analyte concentration. With respect to the standard solution being delivered in a predetermined amount, Morton discloses this but does not teach the use of a calibration loop (or sample loop). It is known in the art that the use of sample loops are other ways to provided predetermined amounts of a fluid. Therefore it would have been obvious to modify Morton to use a calibration loop to deliver a predetermined amount of standard solution to the water sample.

Regarding a means to reunite the two streams into a single flow path. It would have been obvious to one having an ordinary skill in the art to modify Morton to allow for a sample flow to reunite with the water flow from the first path to reduce the amount of waste water, this would provide a more environmentally friendly apparatus.

Regarding trichloroethylene being an analyte of interest, it would have been obvious to one having an ordinary skill in the art to modify Morton to include

trichloroethylene as an analyte of interest because trichloroethylene is a heavy metal and Morton specifically analyzes for heavy metals.

Response to Arguments

Applicant's arguments filed 2/6/06 have been fully considered but they are not persuasive. Applicant argues, "Morton provides no instrumentation for construction of a calibration curve... Thus Morton is incapable of calibrating the instrument by producing a calibration curve." The Examiner would like to point out that the independent claims do not mention or claim a feature of calibrating the instrument or providing a calibration curve but only claim a calibration assembly to **add** a standard of predetermined concentration of analyte to a sample. This is hardly a calibration of an instrument if only a predetermined concentration is added to a sample. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The applicant argues, "the canisters are not like the filters described in Morton which are for removal of suspended particles." It is the Examiners position that a filter that filters sediment out of groundwater would consist of active charcoal in which the charcoal absorbs the sediment out of the water. Further the water is passed through an anion exchange membrane which is an active sorbent media.

Applicant argues, "Figures 1-3 of Morton indicated that all water collected by the system must pass through the sample treatment 30. There is no alternative path

around the sample pretreatment 30 to the measuring cell 32a or 32b. Therefore, it is clear that the sample pretreatment 30 cannot at all be a functional equivalent of the sorptive media canister of Burge.” The Examiner would like to point out in figure 3, the arrows which indicate that groundwater 20a or surface and industrial water 20b can be pumped through water filter 90. This can also be seen in col. 8, lines 28-36. By this path only one water sample, ground water or surface water, runs through the sample pretreatment. The Applicant is incorrect in interpreting that both sample must pass through to the sample pretreatment.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel P. Siefke whose telephone number is 571-272-1262. The examiner can normally be reached on M-F 7:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on 571-272-1700. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sam P. Siefke



June 8, 2006

Jill Warden
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